



Got an outlet?

Power up the car



Ryan Fulcher's plug-in electric car has the potential of getting 100 miles per gallon, and more.

More and more these days, you see them on the road: Toyota Prius hybrid cars that use gasoline as well as batteries for power. Now keep your eyes peeled for one very special Prius – blue with a surprising message printed on the back: 100 + MPG (miles per gallon).

That's Ryan Fulcher's car and as far as he knows, it's the only plug-in hybrid in the state. When he leaves his job at DigiPen in Redmond, and goes home to Federal Way, Ryan plugs the car into a standard outlet, and in the morning, he's ready to go.

Plug-ins, or "PHEVs" are similar to their hybrid cousins, the Prius or Honda Civic hybrid. But not only do PHEVs charge their batteries during braking and coasting, they also have the advantage of getting charged directly from the electric grid.

The technology comes as an upgrade that replaces the small battery in standard hybrids with a more powerful type. It's not cheap to buy the upgrade, but supporters claim over time, gas savings will offset the investment.

Ryan's upgrade was done as a demonstration project by the nonprofit California Cars Initiative, which promotes electric driving to reduce gas consumption, save money and cut global warming emissions. Says spokesman John Davi:

"We say 100+ MPG but it can be much greater. If you don't have a long commute, you could theoretically achieve an infinite MPG by never turning on the gas engine. However there's no free lunch: It's 100+ MPG of gasoline, plus the cost of electricity. You're getting your energy somewhere. It's just that electricity is cheaper, cleaner, and domestic. Another way to look at it is the cost-per-mile. A regular car costs between 12-15 cents a mile; driving electrically costs 2-4 cents a mile."

Ryan can drive about 10 miles on electricity alone, and calls this a work in progress. His particular upgrade requires six hours for recharging, but he notes there are other packages that offer much faster recharging times.

For more information on this new technology, visit the California Cars Web site:

www.calcars.org



Ryan Fulcher shows off the all-important connection for his plug-in electric car, an upgraded Prius.